Applicant : Douglas E. Meisn●t al.   Attorney'●cket No.: 07844-334001 / P308
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Amendments to the Claims:

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims:

1.   (Currently amended) A method of preparing an image for downloading over a link comprising:

      receiving a user selection for an image to prepare;

      retrieving current user settings reflective of desired settings for compressing the image;

      automatically deriving alternative compression settings including compression settings scaled from the current user settings; and

      substantially simultaneously presenting a plurality of variations of the image to the user where each variation is generated using one or more alternative compression settings.

2.   (Original)   The method of claim 1, further including estimating an amount of time required to download a given variation to the user where the estimated time is calculated from an assumed transmission rate of the link.

3.   (Original)   The method of claim 1, further including determining a file format for the image and using the current user settings designated for the file format in presenting a representation of the image.

4.   (Original)   The method of claim 3, wherein the step of determining a file format determines an optimum file format for the image based on a predominant nature of the image data.

5.   (Previously presented)   The method of claim 4, wherein the step of determining an optimum file format for the image includes determining a predominant form for objects in the image and the step of automatically deriving includes scaling compression settings from the current user settings where the particular settings that are scaled depend on the predominant form of the image.

6.   (Original)   The method of claim 5, wherein the predominant form is selected from the group of photographic and line art.

7.   (Original)   The method of claim 6 further comprising determining if the predominant form is photographic and if so, setting the optimum file format to a JPEG/JFIF format.

8.   (Original)   The method of claim 6 further comprising determining if the predominant form is line-art and if so, setting the optimum file format to a GIF format.

9.   (Original)   The method of claim 4, wherein the step of determining an optimum format includes:

calculating an amount of noise in the image;

setting the optimum file format to a JFIF format if the amount of noise is above a predefined threshold, and otherwise setting the optimum file format to a GIF format:

10.   (Original)   The method of claim 9, wherein the step of calculating an amount of noise includes:

for each pixel in the image,

comparing a relative color change between the pixel and one or more adjacent pixels to derive relative color change data;

determining an overall color change for the image using the relative color change data for each pixel; and

comparing the overall color change to the threshold value.

11.   (Original)   The method of claim 10, wherein the step of comparing the relative color change includes deriving a first set of color change data for a pixel by comparing the color of the pixel with a pixel immediately next in raster order.

12.   (Original)   The method of claim 11, wherein the step of comparing the relative color change includes deriving a second set of color change data for the pixel by comparing the color of the pixel with a pixel at a same location in a next scanline of pixels for the image.

13.   (Original)   The method of claim 12, wherein the step of determining an overall color change includes for each color change data set, summing all the color change data and averaging over the image.

14.   (Original)   The method of claim 9, wherein the step of determining an overall color change includes summing all the color change data for the image and averaging over the image.

15.   (Original)   The method of claim 9, wherein the step of comparing a relative color change determines an actual color difference irrespective of a perceptual color difference.

16.   (Original)   The method of claim 4, wherein the step of determining an optimum file format includes:
    inspecting the image to determine if any pixel in the image is transparent; and if so, setting the optimum file format to a GIF format.

17. (Original) The method of claim 4 wherein the step of determining an optimum file format includes:

inspecting the image to determine if the image includes more than one animation frame; and

if so, setting the optimum file format to a GIF format.

18. (Previously presented) The method of claim 1, wherein the step of presenting a plurality of variations includes receiving a user selection that defines a number of variations that are to be presented to the user and generating the number of variations selected.

19. (Original) The method of claim 18 further comprising adjusting the scaling of the current user settings for each variation depending on the number of automatic variations that are to be presented.

20. (Original) The method of claim 1 further comprising displaying the image at the current user settings.

21. (Original) The method of claim 20 further comprising displaying the image at current user defined compression settings along with three variations in a four-up orientation on an output display device.

22. (Previously presented) The method of claim 1, wherein a first set of compression settings is derived by scaling the current user settings and a second set of compression settings is derived by scaling the first set of compression settings.

23. (Previously presented) The method of claim 1 further comprising receiving user modifications to the current user settings and generating a variation of the image using the modified user settings.

24.   (Previously presented)   The method of claim 23, further including recalculating compression settings for each presented variation of the image using the modified user settings and re-generating each variation using the recalculated compression settings.

25.   (Previously presented)   The method of claim 1, wherein each variation of the image is a smaller and lower quality version relative to the image produced using the current user settings.

26.   (Original)   The method of claim 1 where the estimated download time is presented along with each variation of the image.

27.   (Currently amended) A computer program for preparing an image for downloading over a link, the computer program includes instructions for causing a computer to:
        receive a user selection for an image to prepare;
        retrieve current user settings reflective of desired settings for compressing the image;
        automatically derive alternative compression settings including compression settings scaled from the current user settings; and
        substantially simultaneously present a plurality of variations of the image to the user where each variation is generated using one or more alternative compression settings.

28.   (Previously presented)   The computer program of claim 27, further including instructions for causing a computer to:
        estimate an amount of time required to download a given variation to the user where the estimated time is calculated from an assumed transmission rate of the link.

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29. (Previously presented) . The computer program of claim 27, further including instructions for causing a computer to:

determine a file format for the image; and

use the current user settings designated for the file format in presenting a representation of the image.

30. (Previously presented) The computer program of claim 29, wherein instructions for causing a computer to determine a file format include instructions for causing a computer to:

determine an optimum file format for the image based on a predominant nature of the image data.

31. (Previously presented) The computer program of claim 30, wherein instructions for causing a computer to determine an optimum format include instructions for causing a computer to:

calculate an amount of noise in the image;

set the optimum file format to a JFIF format if the amount of noise is above a predefined threshold, and otherwise set the optimum file format to a GIF format.

32. (Previously presented) The computer program of claim 31, wherein instructions for causing a computer to calculate an amount of noise include instructions for causing a computer to:

for each pixel in the image, compare a relative color change between the pixel and one or more adjacent pixels to derive relative color change data;

determine an overall color change for the image using the relative color change data for each pixel; and

compare the overall color change to the threshold value.

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33. (Currently amended) A computer-implemented method for preparing an image for downloading over a link, the method comprising:

receiving one or more compression settings for compressing the image and a number specifying how many variations of the image are to be generated;

automatically deriving a plurality of alternative compression settings that are different from the received compression settings; and

using one or more the derived alternative compression settings to generate a plurality of variations of the image including as many variations as specified by the received number.

34. (Currently amended) The method of claim 33, wherein:

automatically deriving a plurality of alternative compression settings includes deriving one or more alternative compression settings based on the received compression settings.

35. (Currently amended) The method of claim 34, wherein:

deriving one or more alternative compression settings based on the received compression settings includes scaling the received compression settings.

36. (Previously presented) The method of claim 33, wherein:

receiving one or more compression settings includes receiving one or more compression settings based on user input.

37. (Previously presented) The method of claim 33, wherein:

generating a plurality of variations of the image includes generating a variation of the image using the received compression settings.

38. (Previously presented) The method of claim 33, further comprising:

concurrently displaying two or more of the plurality of variations of the image.

39.   (Currently amended) A computer program for preparing an image for downloading over a link, the computer program including instructions for causing a computer to:

receive one or more compression settings for compressing the image and a number specifying how many variations of the image are to be generated;

automatically derive a plurality of alternative compression settings that are different from the received compression settings; and

use ~~one or more~~ the derived alternative compression settings to generate a plurality of variations of the image including as many variations as specified by the received number.

40.   (Currently amended) The computer program of claim 39, wherein instructions for causing a computer to automatically derive a plurality of alternative compression settings include instructions for causing a computer to:

derive one or more alternative compression settings based on the received compression settings.

41.   (Currently amended)   The computer program of claim 40, wherein instructions for causing a computer to derive one or more alternative compression setting based on the received compression settings include instructions for causing a computer to:

scale the received compression settings.

42.   (Previously presented)   The computer program of claim 39, wherein instructions for causing a computer to receive one or more compression settings include instructions for causing a computer to:

receive one or more compression settings based on user input.

43.   (Previously presented)   The computer program of claim 39, wherein instructions for causing a computer to generate a plurality of variations of the image include instructions for causing a computer to:

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generate a variation of the image using the received compression settings.

44. (Previously presented) The computer program of claim 39, further comprising instructions for causing a computer to:

concurrently display two or more of the plurality of variations of the image.